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07/13/2006 14:41 #062 P.002/040

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SPECIFICATION AMENDMENTS

JUL 13 2006

Please amend paragraph 1 on page 11 as follows:

-- It is preferable preferable that the N-type semiconductive particle is surface-treated by a reactive organic silicon compound. --

Please amend paragraph 7 on page 11 as follows:

-- It is preferable that the interlayer contains a ~~resin~~ resin having a water absorption coefficient of 5% by mass or less. --

Please amend paragraph 2 on page 15 as follows:

-- Examples of the metal oxide particle include metal oxides such as titanium oxide (TiO₂), lead zinc oxide (ZnO), tin oxide (SnO₂), zirconium oxide, cerium oxide, iron oxide, aluminum oxide, tungsten oxide and bismuth oxide. Among these, metal oxide particles in IIIa, IVa and IVb are preferable. Specific examples thereof include metal oxides such as titanium oxide (TiO₂), tin oxide (SnO₂), zirconium oxide, cerium oxide and aluminum oxide. --

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07/13/2006 14:42 #062 P.003/040

Please amend paragraph 1 on page 29 as follows:

-- Examples of the N-type semiconductive particle include pigments such as titanium oxide (TiO₂), ~~lead~~ zinc oxide (ZnO) and tin oxide (SnO₂). In the present invention, titanium oxide pigments containing a transition metal in an amount of 100 ppm to 2.0% by mass are preferred. Among these, an anatase-type titanium oxide pigment is preferred. --

Please amend Table 1 which bridges pages 72-73 as follows:

Photoreceptor No.	Surface			Interlayer						Remark <u>UV exposure invention</u>	
	Roughness of Aluminum Substrate Rz (µm)	Anatase-type Titanium Oxide		Binder Resin			Binder Volume Resistivity (GΩm)		Solvent	Dry Film Thickness (µm)	
		Particle Diameter (nm)	Surface Treatment	A	B	A/B					
1	1.0	A1	35	Fluoroethyltri-methoxysilane	ELVTRX4260	10 ^{14.40}	10 ^{14.10}	1/10 ^{3.30}	toluene	1.00	<u>UV exposure invention</u>
2	1.0	A1	35	Fluoroethyltri-methoxysilane	X1010	10 ^{14.45}	10 ^{14.14}	1/10 ^{3.44}	ethanol /isopropanol (6/1)	1.00	<u>photocuring invention</u>
3	1.0	A1	35	Fluoroethyltri-methoxysilane	NL2532	10 ^{14.44}	10 ^{14.10}	1/10 ^{3.4}	toluene /ethyl acetate (1/4)	1.00	<u>photocuring invention</u>
4	1.0	A1	35	Fluoroethyltri-methoxysilane	NL2249E	10 ^{14.47}	10 ^{14.12}	1/10 ^{3.35}	toluene /ethyl acetate (1/4)	1.00	<u>photocuring invention</u>
5	1.0	A1	35	Fluoroethyltri-methoxysilane	SG2000	10 ^{14.49}	10 ^{14.13}	1/10 ^{3.4}	water	1.00	<u>laser photocuring</u>
6	1.0	A1	35	Fluoroethyltri-methoxysilane	SUPERCHON	10 ^{14.50}	10 ^{14.14}	1/10 ^{3.4}	toluene	1.00	<u>laser photocuring</u>

7	0.4	A2	180	methylhydrogen -polysiloxane	SG2000	$10^{12.19}$	$10^{14.23}$	$1/10^{1.44}$	isopropyl alcohol	0.40	within <u>invention</u> specification
8	0.5	A2	180	methylhydrogen -polysiloxane	SG2000	$10^{12.49}$	$10^{14.23}$	$1/10^{1.34}$	isopropyl alcohol	0.30	within <u>invention</u> specification
9	0.5	A2	180	methylhydrogen -polysiloxane	SG2000	$10^{12.49}$	$10^{14.23}$	$1/10^{1.34}$	water	0.40	within <u>invention</u> specification
10	0.5	A2	180	methylhydrogen -polysiloxane	SG2000	$10^{12.49}$	$10^{14.23}$	$1/10^{1.34}$	water	1.00	within <u>invention</u> specification
11	0.5	A2	180	methylhydrogen -polysiloxane	SG2000	$10^{12.49}$	$10^{14.23}$	$1/10^{1.34}$	water	1.50	within <u>invention</u> specification
12	1.0	A3	65	Octyltrimethox -silane	X1010	$10^{14.48}$	$10^{15.42}$	$1/10^{2.44}$	ethanol /n-propyl alcohol (6/1)	1.00	within <u>invention</u> specification

Please amend Table 2 which bridges pages 74-75 as follows:

--

[Table 2]

Photoreceptor No.	Surface Roughness of Aluminum Substrate R_z (μm)	Anatase-type Titanium Oxide			Interlayer			Remark			
		Particle Diameter (nm)	Particle Treatment	Binders	Binders Volume Resistivity (Ωcm)	A	B				
13	1.0	A3	65	Octyltrimine- methoxysilane	x1010	$10^{14.0}$	$10^{15.14}$	$1/10^{0.4}$	ethanol $/n$ -propyl- alcohol(6/1)	2.00	within specification invention
14	2.5	A4	15	Fluoroethyltri- methoxysilane	NL2532	$10^{14.4}$	$10^{15.19}$	$1/10^{0.54}$	toluene $/ethyl$ acetate(1/4)	1.75	within specification invention
15	2.5	A4	15	Fluoroethyltri- methoxysilane	NL2532	$10^{14.4}$	$10^{15.18}$	$1/10^{0.54}$	toluene $/ethyl$ acetate(1/4)	2.50	within specification invention
16	2.5	A4	15	Fluoroethyltri- methoxysilane	NL2532	$10^{14.4}$	$10^{15.18}$	$1/10^{0.54}$	toluene $/ethyl$ acetate(1/4)	5.00	within specification invention
17	2.5	A4	15	Fluoroethyltri- methoxysilane	NL2532	$10^{14.4}$	$10^{15.18}$	$1/10^{0.54}$	toluene $/ethyl$ acetate(1/4)	10.00	within specification invention

18	2.5	A4	15	silica alumina	NL2532	$10^{11.44}$	$10^{15.14}$	$1/10^{0.44}$	toluene /ethyl acetate(1/4)	20.00	within <u>generative</u> <u>invention</u>	
19	3.0	A4	15	Fluoroethyltri-methoxysilane	NL2532	$10^{14.44}$	$10^{11.14}$	$1/10^{0.44}$	toluene /ethyl acetate(1/4)	3.0	within <u>generative</u> <u>invention</u>	
20	1.0	A5	35	Fluoroethyltri-methoxysilane	NL2532	$10^{14.44}$	$10^{11.14}$	$1/10^{0.44}$	toluene /ethyl acetate(1/4)	3.0	without <u>generative</u> <u>invention</u>	
21	1.0	A6	35	Fluoroethyltri-methoxysilane	NL2532	$10^{14.44}$	$10^{11.14}$	$1/10^{0.44}$	toluene /ethyl acetate(1/4)	3.0	without <u>generative</u> <u>invention</u>	

Please amend Table 5 which bridges pages 102-103 as follows:

[Table 5]

Photoreceptor No.	Surface roughness of aluminum substrate R_z (μm)	Interlayer				Remark	
		Uranium Oxide Pigment		Binder Volum Resistivity (Ωcm)			
		Particle Diameter [μm]	Content of iodine element (as by mass)	Surface Treatment Si/Ti	Binder Resin A B N/B		
1	1.0	#111 B1	35 0.5	Fluoroethyltr -methoxysilane	ELYAN1250 0.462	10 ^{11.59} 1/10 ^{5.70} toluene 1.00	
2	1.0	#111 B1	35 0.5	Fluoroethyltr -methoxysilane	X1010 0.462	10 ^{11.43} 1/10 ^{6.11} *1 1.00	
3	1.0	#111 B1	35 0.5	Fluoroethyltr -methoxysilane	FL2522 0.462	10 ^{11.44} 1/10 ^{6.11} *2 1.00	
4	1.0	#111 B1	35 0.5	Fluoroethyltr -methoxysilane	NLU2249E 0.462	10 ^{11.47} 1/10 ^{6.11} *2 1.00	
5	1.0	#111 B1	35 0.5	Fluoroethyltr -methoxysilane	SG2000 0.462	10 ^{11.43} 1/10 ^{6.11} water 1.00	
6	1.0	#111 B1	35 0.5	Fluoroethyltr -methoxysilane	SUPERCHOR 0.462	10 ^{11.48} 1/10 ^{6.11} toluene 1.00	

				Methyltrimethoxysilane	0.510	SG2000	$10^{12.41}$	$10^{11.12}$	$1/10^{1.34}$		0.40		Methyl Invention	
1	0.4	ref	B2	90	0.5									
2	0.5	ref	B2	80	0.5	Methyltrimethoxysilane	0.510	SG2000	$10^{12.40}$	$10^{11.12}$	$1/10^{1.34}$	*3	0.30	Methyl Invention
3	0.5	ref	B2	80	0.5	Methyltrimethoxysilane	0.510	SG2000	$10^{12.40}$	$10^{11.12}$	$1/10^{1.34}$		0.40	Methyl Invention
10	0.5	ref	B2	90	0.5	Methyltrimethoxysilane	0.510	SG2000	$10^{12.41}$	$10^{11.12}$	$1/10^{1.34}$		1.00	Methyl Invention
11	0.5	ref	B2	90	0.5	Methyltrimethoxysilane	0.510	SG2000	$10^{12.41}$	$10^{11.12}$	$1/10^{1.34}$		1.50	Methyl Invention
12	1.0	ref	B3	65	0.5	Oetyltrimethoxysilane	0.113	X1010	$10^{11.43}$	$10^{10.51}$	$1/10^{0.11}$	*1	1.00	Methyl Invention

*1: ethanol/n-propyl alcohol (6/1)

*2: toluene/ethyl acetate (1/4)

*3: isopropyl alcohol

Please amend Table 6 which bridges pages 104-105 as follows:

[Table 6]

Photoreceptor No.	Surface Roughness of Alumina Substrate Ra (µm)	Titanium Oxide Pigment			Interlayer				Remark			
		Type	Particle Diameter (µm)	Content of aluminum element (% by mass)	Surface Treatment	Binder Resin	A	B				
13	1.0	^{**} B3	65	0.5	Oxyd(trimethyl- oxysilane)	0.113	X1010	$10^{11.43}$	$1/10^{0.44}$	*1	2.00	Within invention
14	2.5	^{**} B4	40	0.5	Methyl(trimethyl- oxysilane)	0.340	ML2532	$10^{11.44}$	$1/10^{0.44}$	*2	1.75	Within invention
15	2.5	^{**} B4	40	0.5	Methyl(trimethyl- oxysilane)	0.340	ML2532	$10^{11.44}$	$1/10^{0.44}$	*2	2.50	Within invention
16	2.5	^{**} B4	40	0.5	Methyl(trimethyl- oxysilane)	0.340	ML2532	$10^{11.44}$	$1/10^{0.44}$	*2	5.00	Within invention
17	2.5	^{**} B4	40	0.5	Methyl(trimethyl- oxysilane)	0.340	ML2532	$10^{11.44}$	$1/10^{0.44}$	*2	10.00	Within invention
18	2.5	^{**} B4	40	0.5	Methyl(trimethyl- oxysilane)	0.340	ML2532	$10^{11.44}$	$1/10^{0.44}$	*2	20.00	Within invention
19	3.0	^{**} B4	40	0.5	Methyl(trimethyl- oxysilane)	0.340	ML2532	$10^{11.44}$	$1/10^{0.44}$	*2	3.0	Within invention

20	1.0	-45 B5	15	Julipan	Methylhydrogeno- nopolysiloxane	0.020	NL2532	$10^{1.44}$	$10^{1.44}$	$1/10^{1.34}$	*2	1.00	Without invention
21	1.0	-46 B6	180	1.8	Methyltrimethoxy- silane	0.340	NL2532	$10^{1.44}$	$10^{1.44}$	$1/10^{1.34}$	*2	1.00	Without invention
22	1.0	-47 B7	35	0.5	Methyltrimethoxy- silane	0.010	SG2000	$10^{1.44}$	$10^{1.44}$	$1/10^{1.34}$	water	0.50	Without invention
23	1.0	-48 B8	35	0.5	Methyltrimethoxy- silane	0.565	NL2532	$10^{1.44}$	$10^{1.44}$	$1/10^{1.34}$	*2	5.00	Without invention

*1: ethanol/n-propyl alcohol (6/1)

*2: toluene/ethyl acetate (1/4)

Please amend paragraph 3 on page 95 as follows:

-- In a solution prepared by dissolving 3 parts by mass of fluoroethyltrimethoxysilane in 100 parts by mass of an alcohol/water (10/1) solvent, 100 parts by mass of an anatase-type titanium oxide pigment (primary particle diameter: 35 nm) containing 0.5% by mass of a niobium element was mixed and media-dispersed. After carrying out the media dispersion a whole day and night, the anatase-type titanium oxide pigment was taken out from the media dispersion liquid and dried to obtain a titanium oxide pigment A1 B1 (anatase degree: 100%) surface-treated by fluoroethyltrimethoxysilane. The resulting pigment was dispersed under the following conditions to prepare a dispersion liquid. The dispersion liquid was coated on an electroconductive support and dried so as to form a film with a dry film thickness of 1.0 µm. Using the coated and dried sample, the above-described X-ray photoelectron spectroscopy was carried out. It was found that a Si atom was 8.6%, a Ti atom was 18.6% and Si/Ti was 0.462.

Dispersion Liquid

Binder resin: resin ELVAX4260 (produced by Du Pont Co.) 1 part

Titanium oxide pigment A1 B1 3.0 parts

Toluene 10 parts --

Please amend paragraph 3 on page 96 as follows:

-- In a solution prepared by dissolving 4 parts by mass of methyltrimethoxysilane in 100 parts by mass of an alcohol/water (10/1) solvent, 100 parts by mass of an anatase-type titanium oxide pigment (primary particle diameter: 80 nm) containing 0.5% by mass of a niobium element was mixed and media-dispersed. After carrying out the media dispersion a whole day and night, the anatase-type titanium oxide pigment was taken out from the media dispersion liquid and dried to obtain a titanium oxide pigment A2 B2 (anatase degree: 100%) surface-treated by methyltrimethoxysilane. A dispersion liquid was prepared in the same manner except for using the pigment A2 B2 in place of the titanium oxide pigment A1 B1 of the above-described dispersion liquid. The dispersion liquid was coated on an electroconductive support and dried so as to form a film with a dry film thickness of 1.0 μm . Using the coated and dried sample, the above-described X-ray photoelectron spectroscopy was carried out. From the measurement results, Si/Ti was 0.510. --

Please amend paragraph 5 on page 96 as follows:

-- In a solution prepared by dissolving 1.5 parts by mass of octyltrimethoxysilane in 100 parts by mass of an alcohol/water (10/1) solvent, 100 parts by mass of an anatase-type titanium oxide pigment (primary particle diameter: 65 nm)

containing 0.5% by mass of a niobium element was mixed and media-dispersed. After carrying out the media dispersion a whole day and night, the anatase-type titanium oxide pigment was taken out from the media dispersion liquid and dried to obtain a titanium oxide pigment A3 B3 (anatase degree: 95%) surface-treated by octyltrimethoxysilane. A dispersion liquid was prepared in the same manner except for using the pigment A3 B3 in place of the titanium oxide pigment A1 B1 of the above-described dispersion liquid. The dispersion liquid was coated on an electroconductive support and dried so as to form a film with a dry film thickness of 1.0 μm . Using the coated and dried sample, the above-described X-ray photoelectron spectroscopy was carried out. From the measurement results, Si/Ti was 0.113. --

Please amend paragraph 2 on page 97 as follows:

-- In a solution prepared by dissolving 2 parts by mass of methyltrimethoxysilane in 100 parts by mass of an alcohol/water (10/1) solvent, 100 parts by mass of an anatase-type titanium oxide pigment (primary particle diameter: 40 nm) containing 0.5% by mass of a niobium element was mixed and media-dispersed. After carrying out the media dispersion a whole day and night, the anatase-type titanium oxide pigment was taken out from the media dispersion liquid and dried to obtain a titanium oxide pigment A4 B4 (anatase degree: 100%) surface-

treated by methyltrimethoxysilane. A dispersion liquid was prepared in the same manner except for using the pigment A4 B4 in place of the titanium oxide pigment A1 B1 of the above-described dispersion liquid. The dispersion liquid was coated on an electroconductive support and dried so as to form a film with a dry film thickness of 1.0 μm . Using the coated and dried sample, the above-described X-ray photoelectron spectroscopy was carried out. From the measurement results, Si/Ti was 0.340. --

Please amend paragraph 2 on page 98 as follows:

-- In a solution prepared by dissolving 0.1 part by mass of methylhydrogen polysiloxane in 100 parts by mass of an alcohol/water (10/1) solvent, 100 parts by mass of an anatase-type titanium oxide pigment (primary particle diameter: 15 nm) ~~containing 300 ppm of a niobium element was mixed and media-~~ dispersed. After carrying out the media dispersion a whole day and night, the anatase-type titanium oxide pigment was taken out from the media dispersion liquid and dried to obtain a titanium oxide pigment A5 B5 (anatase degree: 100%) surface-treated by methylhydrogen polysiloxane. A dispersion liquid was prepared in the same manner except for using the pigment A5 B5 in place of the titanium oxide pigment A1 B1 of the above-described dispersion liquid. The dispersion liquid was coated on an electroconductive support and dried so as to form a film with a

dry film thickness of 1.0 μm . Using the coated and dried sample, the above-described X-ray photoelectron spectroscopy was carried out. From the measurement results, Si/Ti was 0.020. --

Please amend paragraph 2 on page 99 as follows:

-- In a solution prepared by dissolving 2 parts by mass of methyltrimethoxysilane in 100 parts by mass of an alcohol/water (10/1) solvent, 100 parts by mass of an anatase-type titanium oxide pigment (primary particle diameter: 180 nm) containing 1.8% by mass of a niobium element was mixed and media-dispersed. After carrying out the media dispersion a whole day and night, the anatase-type titanium oxide pigment was taken out from the media dispersion liquid and dried to obtain a titanium oxide pigment A6 B6 (anatase degree: 92%) surface-treated by methyltrimethoxysilane. A dispersion liquid was prepared in the same manner except for using the pigment A6 B6 in place of the titanium oxide pigment A1 B1 of the above-described dispersion liquid. The dispersion liquid was coated on an electroconductive support and dried so as to form a film with a dry film thickness of 1.0 μm . Using the coated and dried sample, the above-described X-ray photoelectron spectroscopy was carried out. From the measurement results, Si/Ti was 0.340. --

Please amend paragraph 4 on page 99 as follows:

-- In a solution comprising 100 parts by mass of an alcohol/water (10/1) solvent, 100 parts by mass of an anatase-type titanium oxide pigment (primary particle diameter: 35 nm) containing 0.5% by mass of a niobium element was mixed and media-dispersed. After carrying out the media dispersion a whole day and night, the anatase-type titanium oxide pigment was taken out from the media dispersion liquid and dried to obtain a titanium oxide pigment A7 B7 (anatase degree: 92%) solvent-treated by the alcohol/water (10/1). A dispersion liquid was prepared in the same manner except for using the pigment A7 B7 in place of the titanium oxide pigment A1 B1 of the above-described dispersion liquid. The dispersion liquid was coated on an electroconductive support and dried so as to form a film with a dry film thickness of 1.0 µm. Using the coated and dried sample, the above-described X-ray photoelectron spectroscopy was carried out. From the measurement results, Si/Ti was 0.010. --

Please amend paragraph 2 on page 100 as follows:

-- In a solution prepared by dissolving 5 parts by mass of methyltrimethoxysilane in 100 parts by mass of an alcohol/water (10/1) solvent, 100 parts by mass of an anatase-type titanium oxide pigment (primary particle diameter: 35 nm) containing 0.5% by mass of a niobium element was mixed and media-dispersed.

After carrying out the media dispersion a whole day and night, the anatase-type titanium oxide pigment was taken out from the media dispersion liquid and dried to obtain a titanium oxide pigment A8 B8 (anatase degree: 92%) surface-treated by methyltrimethoxysilane. A dispersion liquid was prepared in the same manner except for using the pigment A8 B8 in place of the titanium oxide pigment A1 B1 of the above-described dispersion liquid. The dispersion liquid was coated on an electroconductive support and dried so as to form a film with a dry film thickness of 1.0 μm . Using the coated and dried sample, the above-described X-ray photoelectron spectroscopy was carried out. From the measurement results, Si/Ti was 0.565. --

Please amend paragraph 1 on page 101 as follows:

-- In the photoreceptor 1 of the first embodiment, the photoreceptor 1 was prepared as well except B1 is used instead of A1. Photoreceptor 1 of the second embodiment was prepared in the same manner photoreceptor 1 of the first embodiment, except that titanium oxide pigment B1 was used instead of titanium oxide pigment A1. --

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